covery Act (hazardous waste treatment, storage and disposal facilities, and storage tanks for chemicals and petroleum products), and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund; uncontrolled hazardous waste and contamination sites). These laws delegate many important responsibilities to the states, which have adopted programs for cleaning up and regulating major sources of ground water contamination.

Many states have broader authority than the federal government to prevent and control ground water contamination. In the last several years, many states and local areas have initiated and expanded ground water protection programs by state mandate. It is hoped that other states can learn from recent experiences in the design and implementation of these ground water protection programs. The committee identified 10 states and 3 local ground water programs in different regions of the country that had poten-. tially effective, and innovative protection features for minimizing and preventing ground water contamination.

No program had all the features of a comprehensive ground water protection program (see "Criteria for Effective Ground Water Programs" below). This is due in part to their formative status; the nature of the state legislative process; the interrelationship of ground water problems with those of other environmental media (air, surface water, and land); and the large variety of human activities that can affect ground water. In most states, different strategies and institutional arrangements for ground and surface waters and land management and permitting activities make it difficult to deal with ground water as a single resource to be protected. This is due in part to the fact that it is not a single resource, isolated from others, but can only be effectively protected by an integrated program that addresses all components of an environment collectively.

The essence of prevention is anticipation, planning, assessment, and preventive action. These preventive efforts anticipate adverse effects from chemical and land use practices and the disposal of waste and provide the necessary protection with emphasis on prevention or control of pollutants at the source. To assist in these efforts, the U.S. Environmental Protection Agency has developed a strategy to protect ground water.

EPA GROUND WATER PROTECTION STRATEGY

The EPA adopted a Ground Water Protection Strategy in 1984 that provides a system for internal coordination as well as a strengthening of state programs. Internal coordination has been improved by issuance of guidelines for EPA decisions affecting ground water protection and cleanup. The guidelines include a three-tiered system for classification of ground water,